

CLAIMS :

1. A controlled release formulation of erythromycin A or a derivatives thereof, suitable for once daily administration, comprising a pharmaceutically effective amount of erythromycin and from about 0.1% to about 4% w/w of one or more pharmaceutically acceptable rate controlling polymers.
2. A controlled release formulation as described in claim 1, wherein the erythromycin A derivative is clarithromycin.
3. A controlled release formulation as described in claim 1 wherein erythromycin A or its derivative comprises about 10% w/w to about 90% w/w of the total tablet weight.
4. A controlled release formulation as described in claim 3 wherein erythromycin A or its derivative preferably comprises about 50% w/w to about 90% w/w of the total tablet weight.
5. A controlled release formulation described in claim 1 wherein the pharmaceutically acceptable rate controlling polymer comprises of carbohydrate gum, polyuronic acid salt, cellulose ether, acrylic acid polymer, and mixtures thereof.
6. A controlled release formulation as described in claim 5 wherein the carbohydrate gum is selected from the group consisting of xanthan gum, tragacanth gum, gum karaya, guar gum, acacia, gellan gum, locust bean gum, sclero gum, and mixtures thereof.

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7. A controlled release formulation as described in claim 5 wherein the polyuronic acid salt is selected from the group consisting of alkali metal salts of pectic acid, alkali metal salts of alginic acid, and mixtures thereof.
 8. A controlled release formulation as described in claim 7 wherein the polyuronic acid salt is preferably sodium alginate.
 9. A controlled release formulation as described in claim 5 wherein the cellulose ether are selected from the group consisting of hydroxypropyl methylcellulose, hydroxypropylcellulose, and mixtures thereof.
 10. A controlled release formulation as described in claim 5 wherein the acrylic acid polymer is carbopol.
 11. A monolithic controlled release formulation of clarithromycin comprising 100-1000 mg of clarithromycin, wherein the total weight of the dosage unit is not more than 1500 mg.
 12. A process for the preparation of a controlled release formulation of erythromycin A or a derivative thereof suitable for once daily administration comprising mixing a pharmaceutically effective amount of erythromycin or a derivative thereof with about 0.1% to about 4% w/w of one or more pharmaceutically acceptable rate controlling polymers.